

✓ ✓
Page 62, line 6 from the bottom, change "Organic" to --The organic--.

✓ ✓
Page 69, line 14, change "Organic" to --The organic--.

✓ ✓
Page 72, line 12, change "Aqueous" to --The aqueous--.

✓
Page 74, last line, change "Organic" to --The organic--.

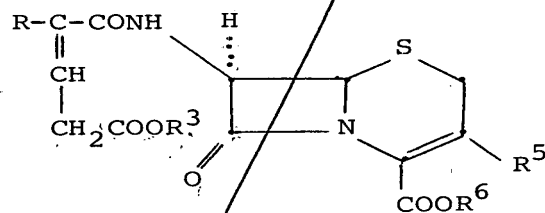
✓ ✓
Page 75, line 6, change "Organic" to --The organic--.

✓ ✓
Page 76, line 10, change "Organic" to --The organic--.

IN THE CLAIMS:

Cancel, without prejudice to the subject matter involved, claims 1 - 28 inclusive and insert in their stead the following new claims:

--29. A compound of the formula



wherein R is 2-aminothiazol-4-yl the amino group of which is unprotected or protected with a protecting group,

B'
Sub C,

Def C1
N
P
N
K
R³ is hydrogen, a pharmacologically acceptable salt forming group, a lower aralkyl group or a lower alkylene group,

R⁵ is hydrogen, methyl, vinyl, cyanovinyl, trifluoropropenyl, methoxymethyl, carbamoyloxymethyl, methylthiomethyl, cyanomethylthiomethyl, thiadiazolylthiomethyl, triazolylthiomethyl, aminomethylthiadiazolylthiomethyl, aminothiadiazolylthiomethyl, methoxy, fluoroethylthio, trifluoroethylthio, or halogen, and
R⁶ is hydrogen, a pharmacologically acceptable salt forming atom or group, a lower alkyl group, a lower alkenyl group or a lower aralkyl group.

B1 Cont
P1
~~30.~~² A compound according to claim ~~29~~¹ wherein

R³ is hydrogen or a pharmacologically acceptable salt forming group,

P1
R⁵ is hydrogen, methyl, vinyl, trifluoropropenyl, methoxymethyl, carbamoyloxymethyl, methylthiomethyl, cyanomethylthiomethyl, thiadiazolylthiomethyl, methoxy, fluoroethylthio, trifluoroethylthio, or halogen, and

P1
R⁶ is hydrogen or a pharmacologically acceptable salt forming atom or group.

~~31.~~³ A compound according to claim ~~29~~¹, said compound being

7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-₈cephem-4-carboxylic acid. ₉

~~32.~~⁴ A compound according to claim ~~29~~¹, said compound being

7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-₈methyl-3-cephem-4-carboxylic acid. ₉

⁵
~~33~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
vinyl-3-cephem-4-carboxylic acid.

⁴
~~34~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
trifluoropropenyl-3-cephem-4-carboxylic acid.

⁷
~~35~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
carbamoyloxymethyl-3-cephem-4-carboxylic acid.

⁸
~~36~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
methoxymethyl-3-cephem-4-carboxylic acid.

⁹
~~37~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
methylthiomethyl-3-cephem-4-carboxylic acid.

¹⁰
~~38~~. A compound according to claim ¹~~20~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-⁹
cyanomethylthiomethyl-3-cephem-4-carboxylic acid.

^N
^P
39. A compound according to claim 29, said compound being
7beta-[2-(2-aminothioazol-4-yl)-4-carboxy-2-butenoylamino]-3-
triazolylthiomethyl-3-cephem-4-carboxylic acid.

^N
¹²
40. A compound according to claim 29, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3-
thiadiazolylthiomethyl-3-cephem-4-carboxylic acid.


¹³
4¹. A compound according to claim ¹~~2~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3⁸~~9~~
methoxy-3-cephem-4-^{carboxylic}~~carboxylic~~ acid.

¹⁴
4¹. A compound according to claim ¹¹~~2~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3⁸~~9~~
chloro-3-cephem-4-carboxylic acid.

¹⁵
4¹. A compound according to claim ¹~~2~~, said compound being
7beta-[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3⁸~~9~~
²~~2~~-fluoroethylthio-3-cephem-4-carboxylic acid.

¹⁶
4¹. A compound according to claim ¹~~2~~, said compound being
7beta[2-(2-aminothiazol-4-yl)-4-carboxy-2-butenoylamino]-3⁸~~9~~
^{2,2,2}~~2~~-trifluoroethylthio-3-cephem-4-carboxylic acid.

¹⁷
4¹. An antibacterial composition which comprises an antibac-
terially effective amount of a compound of claim ¹~~2~~ and a
pharmaceutically acceptable carrier therefor.

¹⁸
4¹. A method for combatting bacteria which comprises bringing
an antibacterially effective amount of a compound of claim ¹~~2~~
into contact with the bacteria. 

R E M A R K S

Further and favorable reconsideration is respectfully requested.

The specification has been reviewed for errors and certain
editorial corrections are effected. It is believed that these